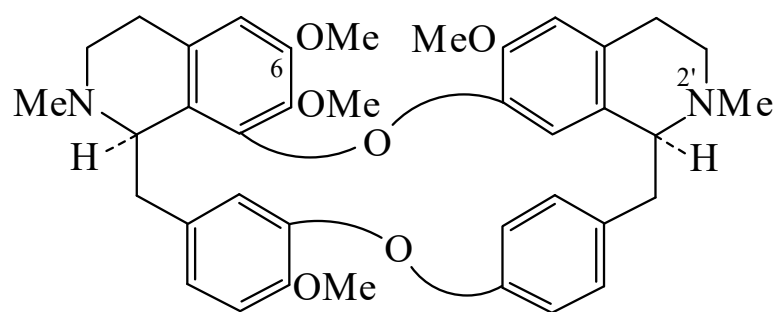




>>Entry Name: Isotetrandrine

Synonym(s): *O*-Methylberbamine



CAS Registry Number: 477-57-6

Molecular Formula: $C_{38}H_{42}N_2O_6$

Molecular Weight: 622.76

Accurate Mass: 622.304288

Percentage Composition: C 73.29%; H 6.80%; N 4.50%; O 15.41%

Biological Source: Alkaloid from *Atherosperma moschatum*, *Berberis empetrifolia*, *Berberis kawakamii*, *Berberis mingetsensis*, *Berberis morrisonensis*, *Berberis poiretii*, *Berberis thunbergii*, *Cyclea barbata*, *Doryphora aromatica*, *Isopyrum thalictroides*, *Laurelia sempervirens*, *Limaciopsis loangensis*, *Mahonia japonica*, *Mahonia lomariifolia*, *Mahonia morrisonensis*, *Mahonia philippinensis*, *Pycnarrhena australiana*, *Pycnarrhena manillensis*, *Stephania cepharantha*, *Stephania elegans*, *Thalictrum foetidum*, *Tiliacora funifera*, and *Triclisia gillettii* (Atherospermataceae, Berberidaceae, Menispermaceae, Ranunculaceae)

Use/Importance: Shows *in vitro* antineoplastic activity against HeLa cells and Ehrlich ascites. Antiinflammatory, antihypertensive agent

Physical Description: Prisms (MeOH)

Melting Point: Mp 182-183°

Optical Rotation: $[\alpha]_D^{20} +150.7$ (c, 0.85 in $CHCl_3$)

Calculated Log P Data: Log P 8.3 (uncertain value) (calc)

UV: [neutral] λ_{max} 218 (ϵ 31600); 240 (sh) (ϵ 15800); 282 (ϵ 12600) (MeOH) (Derep)

Hazard & Toxicity: LD₅₀ (mus, orl) 6400 mg/kg. LD₅₀ (mus, ipr) 160 mg/kg

Sigma: I0522

>>Derivative: 2'-*N*-Oxide

Synonym(s): Isotetrandrine *N*-2'-oxide

CAS Registry Number: 70191-83-2

Molecular Formula: $C_{38}H_{42}N_2O_7$

Molecular Weight: 638.759

Accurate Mass: 638.299203

Percentage Composition: C 71.45%; H 6.63%; N 4.39%; O 17.53%

Biological Source: Alkaloid from the roots of *Limaciopsis loangensis* (Menispermaceae)

Physical Description: Cryst. (MeOH)

Melting Point: Mp 191-192°

Optical Rotation: $[\alpha]_D +94$ ($CHCl_3$)

>>Derivative: 2'-*N*-De-Me

Synonym(s): 2'-Norisotetrandrine

CAS Registry Number: 70191-82-1

Molecular Formula: $C_{37}H_{40}N_2O_6$

Molecular Weight: 608.733

Accurate Mass: 608.288638

Percentage Composition: C 73.01%; H 6.62%; N 4.60%; O 15.77%

Biological Source: Alkaloid from the roots of *Limaciopsis loangensis* (Menispermaceae)

Physical Description: Noncryst.

Optical Rotation: $[\alpha]_D +26$ ($CHCl_3$)

>>Derivative: *N*^{2'}-Me

Synonym(s): 2'-*N*-Methylisotetrandrine

CAS Registry Number: 68331-87-3

Molecular Formula: $C_{39}H_{45}N_2O_6^{(+)}$